Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	WT Docket 02-55
	)	
Improving Public Safety Communications	)	
in the 800 MHz Band	)	

Comments of Region 5 800 MHz Regional Planning Committee

The Region 5 800 MHz Regional Planning Committee (Region 5) represents the 10 counties of Southern California.[1] Two counties, San Diego and Imperial, share a border with Mexico. On the north, San Diego County shares a border with Orange County and is part of the most frequency-congested area of the nation.

Before the border counties can be re-banded per this docket, a new border 800 MHz sharing agreement must be negotiated with Mexico. While Region 5 fully understands that the Commission and the State Department must develop and negotiate a new agreement with Mexico, Region 5 submits these Comments to share our concerns and offer a suggested band plan for consideration.

Region 5 has two primary concerns for a new agreement, first the NPSPAC channels must be consistent in the border and non-border areas of the region, and second, there

[1] The counties are San Luis Obispo, Santa Barbara, Ventura, Kern, Los Angeles, San Bernardino, Riverside, Orange, San Diego and Imperial.

must be sufficient spectrum available to complete the re-band without any public safety agency receiving less channels than currently licensed.

If the NPSPAC channels are not consistent throughout the region, the five (5) nationwide and two (2) statewide mutual aid channels will not be consistent in Region 5 or throughout California. The California mutual aid system is based upon the use of local resources first in the event of a disaster and when those resources are fully committed, bringing in out of area resources. For example in the wildland fires of October 2003, fire strike teams were sent to San Diego County from all areas of the state. This illustrates the requirement that the mutual aid channels must be identical throughout the state. Both Region 5 and Northern California (Region 6), were careful to coordinate selection of the two statewide mutual aid channels to meet this requirement.

Today, non-NPSPAC channel assignments in the border area are offset 12.5 kHz from the non-border channels[2]. This allows more assignments in the border area where the spectrum is shared with Mexico. However, rule section 90.621 (b)(7), requires that offset channels be considered as if they are co-channel for channel spacing between stations. This does not take advantage of the extra interference protection that offset channels afford and therefore is not spectrum efficient. Given the spectrum congestion in Southern California, this policy should be reconsidered.

The plan as shown in the charts attached would result in the NPSPAC spectrum being aligned in both border and non-border areas. This plan equally divides the spectrum

[2] See Rule 90.619

between Mexico and the U.S. in the same manner as in the current distribution. Although not clearly shown in the chart, the NPSPAC spectrum would continue to be shared with Mexico on the same basis as today only at the lower frequency segments. We have coordinated this plan with Nextel and it reflects Nextel's and our knowledge of Mexico's usage and its impacts on non-border areas. The plan is intended to minimize impact to users in both Mexico and the U.S.

However, Nextel has informed us that finding enough clear channels in the San Diego area will be difficult and may result in a shortfall of 5 channels. In any case, there will not be any excess non-NPSPAC channels available to public safety in the San Diego area. The NPSPAC spectrum is fully loaded under the most spectrum efficient criteria in the nation[3]. For those reasons, we discuss methods to better utilize the spectrum and make appropriate recommendations below.

Recommendations:

1. Change short spacing requirements of rule section 90.621 (7) to reflect additional reduction in interference by offsetting the Mexican border frequencies 12.5 kHz. Currently, the rule requires that the offset frequencies be treated as if they are co-channel. Testing done in the mid 1980s by the County of San Bernardino,

[3] See Section 5.4 Page 31 of the Region 5 Plan. Licensees must tolerate +20 dBμof co-channel and +35 dBμ of 12.5 kHz adjacent channel interfering signals. This resulted in co-channel stations as close as 35 miles apart and adjacent channel stations 5 to 6 miles apart.

California in support of a waiver filing[4] to use offset channels found the 12.5 kHz offset channels afforded between 15 to 20 dB of additional interference protection compared to co-channel interference. This was using full 5 kHz deviation on the frequencies. This work led to the adoption of 12.5 kHz spacing for NPSPAC channels using a tighter emissions mask. Since that time digital emissions are starting to be implemented. We reviewed the TIA TSB88 standard to determine what protection factor is appropriate with digital modulation. From that review a conservative factor of 5 dB of additional protection appears appropriate and would not cause interference. This additional interference protection can be used to allow shorter spacing between offset channels.

2. Modify rule section 90.621 (b)(5)[5] to delete the requirement for each co-channel licensee to accept any interference resulting from the close spacing. Instead, condition the applicant's license to require the new licensee to mitigate any harmful interference to existing licensed systems. This existing rule provides a strong disincentive to existing licensees to grant concurrence since any unforeseen interference from the new user must be tolerated. Under normal circumstances, an entity will not grant concurrence unless it's very certain there will be no

[4] Wavier granted October 20, 1987 to County of San Bernardino.

[5] (5) The separation between co-channel systems may be less than the separations defined above if an applicant submits with its application letters of concurrence indicating that the applicant and each co-channel licensee within the specified separation agree to accept any interference resulting from the reduced separation between their systems. Each letter from a co-channel licensee must certify that the system of the concurring licensee is constructed and fully operational. The applicant must also submit with its application a certificate of service indicating that all concurring co-channel licensees have been served with an actual copy of the application.

interference, however prudence dictates not to give up all rights as required by this rule section.

3. As noted above, now and after re-banding there will be few if any clear channels in Mexican border area, even assuming the above recommendations are implemented. The proposed new band plan includes a block of spectrum between 811/856 to 816/861 MHz that interleaves US and Mexico spectrum with 60 channels allocated to Mexico. To provide a viable band plan that includes the San Diego County area, Region 5 requests the FCC attempt to negotiate those channels for US use in Region 5.

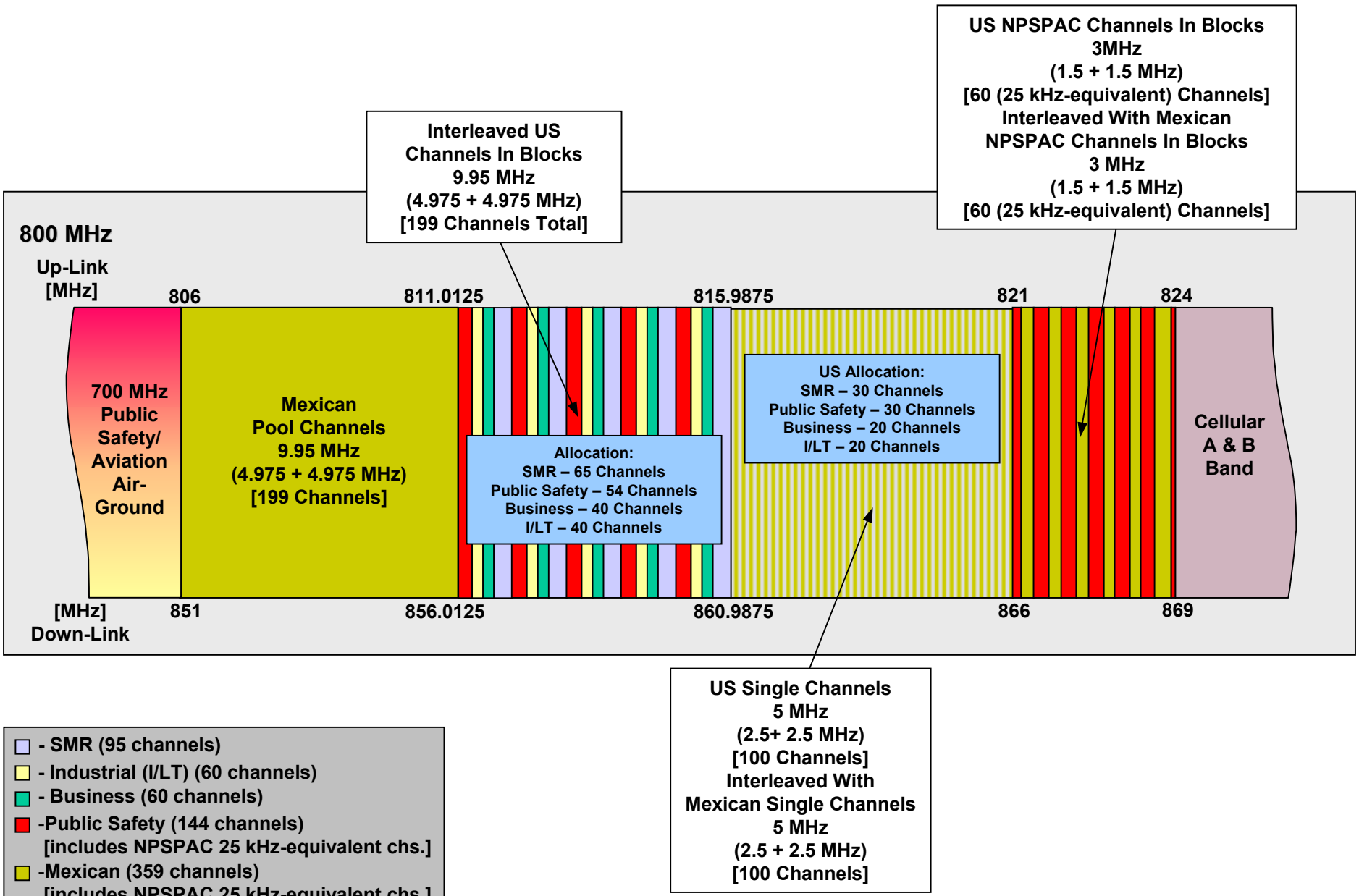
Respectfully Submitted

Garrett Mayer

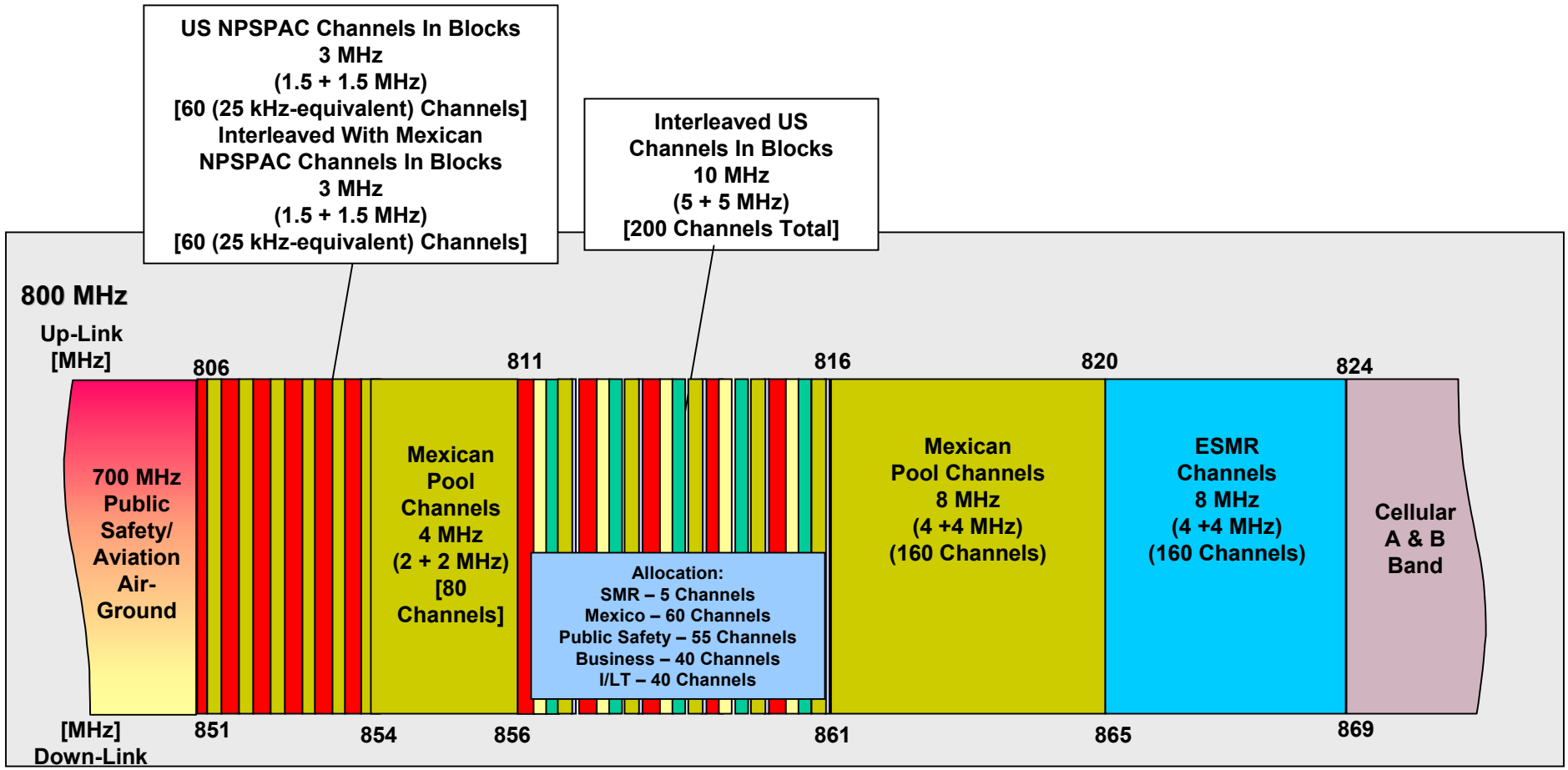
Chairman, Region 5

November 11, 2004

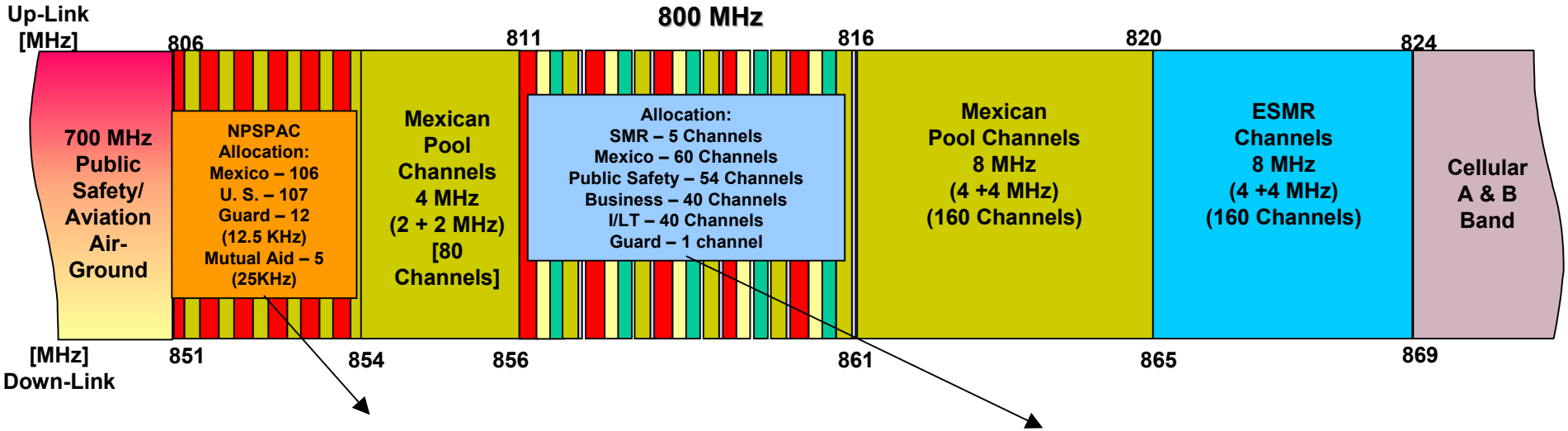
Mexican Border Allocation Today



Proposed Mexican Border Allocation



- SMR (5 channels)
- Industrial (I/LT) (60 channels)
- Business (60 channels)
- Public Safety (145 channels)
  [includes NPSPAC 25 kHz-equivalent chs.]
- Mexican (360 channels)
  [includes NPSPAC 25 kHz-equivalent chs.]
- ESMR (160 channels)



8510125	both
8510250	n/a
8510375	US
8510500	US
8510625	US
8510750	US
8510875	US
8511000	US
8511125	US
8511250	US
8511375	US
8511500	Guard
8511625	Mexico
8511750	Mexico
8511875	Mexico
8512000	Mexico
8512125	Mexico
8512250	Mexico
8512375	Mexico
8512500	Mexico
8512625	Mexico
8512750	Mexico
8512875	Mexico
8513000	Mexico
8513125	Mexico
8513250	Mexico
8513375	Mexico
8513500	Mexico
8513625	Mexico
8513750	Guard
8513875	US
8514000	US
8514125	US
8514250	US
8514375	US
8514500	US
8514625	US
8514750	US
8514875	US
8515000	n/a
8515125	both
8515250	n/a
8515375	US
8515500	US
8515625	US
8515750	US
8515875	US
8516000	US
8516125	US
8516250	US

8516375	US
8516500	Guard
8516625	Mexico
8516750	Mexico
8516875	Mexico
8517000	Mexico
8517125	Mexico
8517250	Mexico
8517375	Mexico
8517500	Mexico
8517625	Mexico
8517750	Mexico
8517875	Mexico
8518000	Mexico
8518125	Mexico
8518250	Mexico
8518375	Mexico
8518500	Mexico
8518625	Mexico
8518750	Guard
8518875	US
8519000	US
8519125	US
8519250	US
8519375	US
8519500	US
8519625	US
8519750	US
8519875	US
8520000	n/a
8520125	both
8520250	n/a
8520375	US
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8521250	US
8521375	US
8521500	Guard
8521625	Mexico
8521750	Mexico
8521875	Mexico
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8522125	Mexico
8522250	Mexico
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8522500	Mexico

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8523750	Guard
8523875	US
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8524250	US
8524375	US
8524500	US
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8526250	US
8526375	US
8526500	Guard
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8527125	Mexico
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8527375	Mexico
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8528125	Mexico
8528250	Mexico
8528375	Mexico
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8528625	Guard
8528750	US

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8531500	Guard
8531625	Mexico
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8536125	Guard
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8538375	Mexico
8538500	Mexico
8538625	Mexico
8538750	Mexico
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8539000	Mexico
8539125	Guard
8539250	US
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8539500	US
8539625	US
8539750	US
8539875	US

8560000	Guard
8560250	Safety
8560500	Safety
8560750	Safety
8561000	Safety
8561250	Safety
8561500	Safety
8561750	Safety
8562000	Safety
8562250	Safety
8562500	Safety
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8563000	ILT
8563250	ILT
8563500	ILT
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8564250	ILT
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8569750	SMR
8570000	Safety
8570250	Safety
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8570750	Safety
8571000	Safety
8571250	Safety
8571500	Safety
8571750	Safety
8572000	Safety
8572250	Safety

8572500	Safety
8572750	ILT
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8573250	ILT
8573500	ILT
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8574250	ILT
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8600500	Safety
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8602500	Safety
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8606750	mexico
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